GREGORY W. JEFFRIES, CUC

EDUCATION

- Oklahoma State University Surveying/Geomatics
- Miami-Dade College Civil Engineering

PROFESSIONAL REGISTRATIONS

- Licensed Contractor, Florida, No. CUC1224926
- Licensed Contractor, Texas, No. GC-005334

PROFESSIONAL CERTIFICATIONS

- Veriforce Certified Evaluator OQ in 35 Categories
- Certified Utility Locator / Certified GPR Technician
- Certified Utility Coordinator, Utility Conflict Management, Utility Relocation
- TxDOT Certified 11.3.1, 18.3.1 & 18.6.1

PROFESSIONAL AFFILIATIONS

- ASCE UESI Subsurface Utility Engineering & Investigations Committee – Committee Chair
- ASCE UESI Utility Risk Management Division Executive Committee – Vice-Chair
- Buried Asset Management Institute

 International (BAMI-I), Board of
 Directors, Executive Group Secretary
- National Utility Locating Contractors Association (NULCA) – Past-President
- Common Ground Alliance,
 Committee Member; Best
 Practices, Technology, Stakeholder
 Advocacy
- Subsurface Utility Engineering Association – Founding Board Member

EXPERIENCE

Mr. Jeffries is an industry veteran with over three decades of extensive experience with utility, road, and bridge construction; surveying; subsurface utility engineering; and utility location services. He began his career on a survey crew, eventually moving on to utility, road, and bridge inspection. Utilizing the knowledge gained in these areas, Mr. Jeffries graduated to project management and established himself first as a utility construction/construction management expert with a specialty in addressing utility location and avoidance issues. He is well-versed in all aspects of utility location, from EM Theory and Application to Vacuum Excavation through Ground Penetrating Radar Theory and Application.

Mr. Jeffries' current responsibilities include managing activities related to SUE Business Development, providing training and certification of SUE staff, and advising on equipment/technology acquisitions. He oversees SUE/UC projects and pursuits throughout the United States and in Dubai, UAE, Riyadh, KSA, Lahore & Karachi, PK

EMPLOYMENT HISTORY

Clearline, Inc, 06/23 - Present, Utility Division Director

 Buildup and management of a new business entity to provide operations in Texas, New Mexico, Oklahoma, and Colorado. Responsible for developing clients, business opportunities, practice manual, SOP's, equipment evaluations and purchases, field reporting software and training materials.

Colliers Engineering & Design, 03/19 – 06/23, Regional Director

Buildup and management of a fledgling SUE program previously operating only on the east coast. Expanded operations to Texas, New Mexico, and Colorado, expanding from ten (10) total staff members in three (3) office locations to seventy (70) staff members in eight (8) office locations in three years. Responsible for developing internal SUE practice manual, SOP's, equipment evaluations and purchases, field reporting software and training materials. Direct P&L responsibility, revenue growth from approximately \$1M per year to over \$8M per year.

McKim & Creed; 12/16 - 03/19, Regional SUE Manager - TX

Startup of SUE operation in Texas following company acquisition of Survcon from AECOM. Established SUE in Dallas office and expanded to Houston office in first year. In year two, successful win of TxDOT Dallas District IDIQ SUE contract as prime and Utility Coordination contract in Pharr district for segments of US 281/I-69. Grew staff from one (1) in Dallas to six (6) and added two (2) SUE staff in Houston to support SUE portions of two IDIQ PS&E contracts with outside firms.

USIC/Reconn; 04/16 - 11/16, Operations Manager

 Joined USIC to assist with rollout of the "Reconn" brand, and conversion of SafeSite acquisition in Colorado to the new brand identification. Original intentions included the development of a SUE operation in select locations. Original plans were scaled back to private locating services to avoid becoming an authorized professional engineering org.

Surveying & Mapping; 04/14 – 03/16, SUE Department Manager

Joined firm as Senior PM and was elevated to Department Manager in six months as department grew.
 Drafted first company SUE procedures manual and successfully negotiated for TexRail SUE contract (\$2.7M), wind farm and electric transmission projects.

CAS; 09/98 – 03/14, Vice President – SUE & Utility Services

Rejoined firm after sale of DTI to MasTec. Initially served as Project Engineer on two (2) county highway projects. Tasked to develop a SUE program in late 1999 after the company experienced a significant utility conflict event. Built SUE group from ground up and simultaneously built one call group to address niche services for municipalities to locate water & sewer systems to comply with revised one call statutes. Promoted to Principal – Vice President in 2004 over utility services group averaging \$2.5M per year. Successfully negotiated \$1M SUE contract for I-595 expansion and state-wide 3D GPR contract for FDOT.

Designed Traffic, 01/96 - 08/98, Principal Sr. Project Manager - Const.

 Joined firm in January 1996 as a Project Manager for county-wide traffic signalization and lighting project. Successfully negotiated for additional FDOT projects as well as GDOT projects. Promoted to Principal Project Manager in early 1997 and oversaw expansion of two additional offices in Florida and one office in Georgia. The company was acquired by MasTec in May 1998 and absorbed into their network solutions group in August 1998.

CAS - 09/93 - 01/96, Project / Office Engineer - Const

 Joined CAS as Sr. Inspector for an I-95 interchange project in Fort Lauderdale, FL. Promoted to Project Engineer following departure of original engineer. Changes required hiring additional office staff and field inspections staff, negotiating contract extensions and fee increases as additional scope was added. Successfully closed out project with high marks for quality.

Metric Engineering; 09/91 - 09/93, Sr. Bridge Inspector

• Sr. Bridge Inspector in I-95 project with three complex bridges and 1-mile segment of AASHTO Beam elevated roadway, four pile-supported structural retaining walls. Supervised a team of four (4) bridge inspectors and two (2) roadway inspectors.

Post, Buckley, Schuh & Jernigan (PBS&J), 12/87 - 09/91, Sr. Engineering Technician

 Recruited from FDOT to PBS&J for massive interchange project, I-95/I-595/SR 84/Airport Expressway, served as Sr. Roadway and Approach Inspector for two years, offered promotion to join PBS&J Turnpike General Consultant office as lead roadway and bridge inspector.

FDOT, 01/83 - 12/87, Engineering/Survey Technician

• Joined FDOT in Jan 1983 on District Location Survey Crew as a Rodman. Promoted to instrument operator/Jr. crew chief 1984. Promoted to engineering technician in 1985 to assist with inspections on the new Fort Lauderdale Airport Interchange with US-1, finished FDOT as a Tech 3 Sr. Engineering Technician.

Business Ventures

Utility Damage Investigations, LLC; 09/13 – Present

• Started niche service firm on request from a construction claims attorney to provide Utility Claims Analysis / Expert Witness Services.

JAG Florida Ventures, LLC; 01/09 - 06/11

 Managing Member – started firm initially to represent Metrotech locating equipment as a distributor for South Florida. Morphed into small telecom construction firm performing fiber construction for cell tower backhaul services for two major carriers. Sold firm in 2011.

REPRESENTATIVE PROJECTS 2023-2024

TxDOT FM 3009 SUE Investigation, FM 2252 to Bat Cave Road

Project Director and Quality Assurance Manager for full SUE investigation, QLD through QLB, Records Research, Permit Search, Liaison with Utility Owners/Representatives, QA/QC review, report to TxDOT, findings confirmations with utility owners.

TxDOT FM 2004 SUE Investigation, Oak Dr to SH 6 & SH 6 to Jack Brooks Rd.

Project Director and Quality Assurance Manager for full SUE investigation, QLD through QLB, Records Research, Permit Search, Liaison with Utility Owners/Representatives, QA/QC review, report to TxDOT, findings confirmations with utility owners.

TxDOT SH 5 interchange with SH 121 SUE Investigation

Project Director and Quality Assurance Manager for full SUE investigation, QLD through QLB, Records Research. Permit Search, Liaison with Utility Owners/Representatives, QA/QC review, report to TxDOT, findings confirmations with utility owners

ODOT US 64 / US 281 SUE Investigation, 8-miles

Project Director and Quality Assurance Manager for full SUE investigation, QLD through QLB, Records Research, Permit Search, QA/QC review, report to ODOT, findings confirmations with utility owners

ODOT US 60 / US 283 SUE Investigation, 7-miles

Project Director and Quality Assurance Manager for full SUE investigation, QLD through QLB, Records Research, Permit Search, QA/QC review, report to ODOT, findings confirmations with utility owners

REPRESENTATIVE PROJECTS 2019-2023

Telecom Pole Inventories & Inspection Services – Confidential Client

Project Director and Quality Assurance Manager for multi-state utility pole inspection projects in preparation of fiber/broadband upgrades in ME, NH, VT, MI, MS, VA, LA, TX & CA. Oversaw crew of fourteen (14) to sixteen (16) field technicians inspecting and documenting poles with Ike GPS systems. Group performed over 780,000 pole inspections over 18 month period.

FiberOne Project - Black & Veatch / Verizon SUE QLD - QLA. Metro- Denver. CO

Project Director for 384-mile fiber construction project around Denver Metro area. Oversaw two Professional Engineer/Project managers, four EIT's, two Asst. PM's, and eight (8) SUE Field Crews for this project.

Dallas County Community College (DCCCD) Campuses Utility Investigations, Dallas County, TX

Project Director for multi-campus utility investigation for design and placement of new fiber optic communication systems. Primary challenges involved working within open campuses with ongoing classes and events with an enrollment of over 86,000 and more than 6,300 faculty across six campuses, complex campus layouts with architectural elements within the proposed fiber pathways, tall buildings and tree canopy as well as obscured inbuilding connection points that required special investigation and survey considerations.

NYISO - Transmission Planning & Investigation

Long Island, NY - NextEra Client

Project Director and Quality Assurance Oversight for preliminary SUE investigation of multiple routes for proposed 156-mile transmission project to bring power from off-shore wind facilities.

GRID Investment Program SUE Investigation

Atlanta, Georgia Area - Quanta Services Prime - Georgia Power Owner

Project Director and Quality Assurance Manager for multi-phase project for electric grid upgrades throughout North Georgia. Project phases range from 9-miles to 40-miles.

Successful Teaming with Multiple Partners for TxDOT and Municipal pursuits

Dallas District IDIQ SUE Contract - Criado & Associates Prime Austin District IDIQ SUE Contract - ARS Engineers Prime Statewide Survey IDIQ Contract – ARS Engineers Prime Off System Bridge IDIQ Contract – HW Lochner Prime EL Paso District IDIQ PS&E Contract - HW Lochner Prime City of Irving SUE/Potholing Contract – Criado & Associates Prime

Successful Pursuits and Teaming with Multiple Partners for NMDOT and Municipal pursuits

NMDOT Statewide IDIQ SUE Contract – Colliers Engineering Prime
NMDOT Utility Coordination Contract US60 Clovis – Colliers Engineering Prime
City of Rio Rancho SUE & Utility Coordination Contract – NV5 Prime
Route 98 NM SUE Contract – AECOM Prime
US 550 SUE & Utility Coordination – AECOM Prime

REPRESENTATIVE PROJECTS – 2016-2019

TxDOT Dallas District SUE – 2019 Contract, \$3M IDIQ Project Director / Client Manager, Mr. Jeffries was crucial to the win on this award. Mr. Jeffries provided the entire Q&R Package, which was scored very highly by TxDOT resulting in an award for contract. Project provided critical SUE services for seven miles of I-35 reconstruction south of Dallas and six miles of I-20 east of Dallas.

TxDOT US 281 Hidalgo County - 3229 FM 490 to FM 1017

Project Manager for the realignment/reconstruction of 7.04 miles of U.S. 21 in Hidalgo County, Texas. The project is located in TxDOT's Pharr District. Contract included performing subsurface utility engineering levels QL-D through QL-A, utility adjustment coordination, and minor surveying.

Front Street SUE – Mesquite - KHA, Kimley Horn, Mesquite, TX – Project Manager, 15k ft of commercial & RR frontage road proposed for new water and sewer upgrades. Provided subsurface utility investigation including identification and mapping of existing systems, water, sewer, power, gas, communications and stormwater

US 67 & Joe Wilson SUE – Cedar Hill, TX – KHA, Major interchange for TxDOT, Project Manager for interchange SUE and widening of Joe Wilson Rd from two-lane rural to four-lane urban section, provided subsurface utility investigation including identification and mapping of existing systems, water, sewer, power, gas, communications and stormwater

Lasiter Site SUE – Crowley, TX – Pape-Dawson, Project Manager on 300+ acre development, SUE investigation found several undocumented electrical installations through parcel (no recorded easements). Coordinated full survey and recordation of proper easements.

DART Cotton Belt SUE - ARS, ARS Engineers, Inc., Dallas, TX: Project Manager for Fifty-Seven (57) grade crossings, full QL-B SUE for Design/Build Project. Managed multiple crews to complete investigations in 45-day timeline for field work and 15-day timeline for final deliverables.

IH30/IH161 Vac Excavation, ARS Engineers, Inc., Grand Prairie, TX: Project Manager and on-site advisor for this project. Locate City owned 30" PCCP water main, previously unlocatable by other SUE firms

TxDOT FM720 Test holes, ARS Engineers, Inc., Little Elm, TX: Project Manager on this project. Difficult SUE project, QL-B — QL-A on newly acquired TxDOT ROW section for proposed four-lane section, existing water, sewer, FOC and PCCP raw water delivery lines. Acquired ROW was former cattle pasture with drainage conveyance ditches on three sides limiting access.

Nebraska Furniture Mart - Slot Trenching - Criado & Assoc, Criado & Associates, The Colony, TX: Project Manager for SUE slot trenching for power and telecom installations to largest furniture store in USA

Grand Gulf Nuclear Power Station - SUE, Entergy Power Development Corp., Port Gibson, MS: Project Manager for Full GPR QL-B investigation of 25,000 SF area within security area adjacent to generation vessels. High-security site with complex access requirements.

City of Irving - Atmos Vac Trench, Hayden Consultants, Inc, Irving, TX: Project Manager on this project. QL-A locating of 16" HP Transmission line at multiple points for proposed crossings. Coordination with multiple entities for property access and special restoration requirements.

NDM-DPCWC SUE for 36inch WM, Nathan D. Maier Consulting Engineers, Inc., TX: Project Manager for QL-D through QL-A SUE for placement of new valve and AR stations at ½ mile intervals along 16-mile line.

Randol Mill Project, Pape-Dawson Engineers, Inc., TX: Project Manager for O&G Pipeline corridors through development, oil and gas well collection/gathering lines (undocumented). GPR investigation for potential cemetery and marked grave sites. Full SUE for 1-mile drainage outfall to Trinity River. Mr. Jeffries served as Project Manager on this project. Full SUE mapping of existing utilities to feed proposed development.

PWT Brine Pipeline and Disposal Network - Haynesville Region, Produced Water Transfer, LLC, Logansport, LA: Project manager for a new brine pipeline disposal well network to transfer up to 165,000 barrels of oil- and gas-produced wastewater per day. 12.5-mile fiberglass pipeline and HDD under the Sabine River, distribution facility, and disposal wellfield, four salt water disposal wells. Managed the right-of-way acquisition, due diligence, environmental permitting, design engineering, SUE, construction and commissioning.

South Texas Gateway Midstream Pipeline - Engineering, Produced Water Transfer, LLC, Karnes City, TX: Project Manager for the design and construction of 15 miles of pipeline that cross three state highways and eight county roadways. Installation consisted of seven horizontal directional drills (HDD) and nine jack-and-bore crossings. developed SUE, detailed drawings, equipment list and a cost estimate for construction.

TxDOT PS&E, **Ft Worth District I30/SH161**, **LandTech**, **Ft Worth**, **TX**: Project Manager for \$8M IDIQ on-call PS&E contract, including SUE, Utility Coordination and Utility Construction Oversight. Project included six (6) independent sites near Austin and San Antonio varying in project length from .35-miles to 1.1-miles, all requiring SUE and Utility Coordination for roadway modifications including one project with UPRR grade crossing.

BNA-Nashville International Airport, Phase II SUE, Nashville, TN:

Project Manager; Full SUE QL-D through QL-A for new terminal "D" expansion. Provided records analysis, and review of airport GIS system, performed and oversaw full utility designating and GPR data collection for portions of Terminal "A", main concourse and newly proposed Terminal "D", former rental car facilities, parking garage, entrance roads and SWA Cargo facility as well as proposed Central Utilities Plant (CUP) Area. Services performed on both public access portion and secure airside portion of the project. Provided independent survey control, GPS & Conventional survey of all utility designations, utility features and test hole locations. Provided full Civil3D CAD deliverable.

BNA-Nashville International Airport, Phase III SUE, Hensel Phelps Construction Company, Nashville, TN: Project Manager. SUE QL-C through QL-A for new International terminal addition and secure customs access area. Performed full utility designating and GPR data collection for new international concourse. Services performed completely within secure airside areas during off-peak operational hours (overnight). Provided independent survey control, performed GPS survey of all utility designations, utility features and test hole locations. Provided full Civil3D CAD deliverable.

REPRESENTATIVE PROJECTS - 2014-2016

TexRail Commuter Rail - Dallas-Fort Worth, TX Subsurface Utility Engineering & Coordination

Full SUE for 27.2-Mile Commuter Rail. Provided project management and oversight for comprehensive SUE project with a 365-day NTP to Deliverable. Managed two HUB/DBE subs and delivered project more than 30 days ahead of schedule.

Subsurface Utility Engineering, Wind Farm, Javelina Wind, Phase I & II, NextEra Energy, Laredo, TX, Project Manager for full SUE Services associated with the design and placement of two hundred thirty-four (234) wind turbines, 200-miles of feeder/collector lines, 75-miles of access roads and three electrical substations. Provided subsurface utility investigation including identification and mapping of existing systems, hundreds of undocumented existing oil gathering pipelines located in the project window. Performed extensive EM & GPR clearing of turbine sites and collector corridors.

Subsurface Utility Engineering, Power Transmission, Illinois Rivers Project, Ameren Energy, Project Manager for full SUE Services associated with the design and placement of 3,194 electric transmission towers crossing 363-miles of Illinois. Provided subsurface utility investigation including identification and mapping of existing systems, hundreds of undocumented existing oil gathering pipelines and farm drainage tiles located in the project window. Performed extensive EM & GPR clearing of tower sites.

Subsurface Utility Engineering, Oil & Gas Terminals, New Tanks and 1-mile Pipeline, Magellan Midstream Partners Corpus Christi, Texas, Project Manager for QL-B and QL-A SUE Services associated with the design and placement of seven new 175' diameter petroleum storage tanks and one-mile methanol pipeline. Provided subsurface utility investigation including identification and mapping of existing systems, more than 22 existing petrochemical pipelines located in the design corridor

Subsurface Utility Engineering, Public Institution Facility, Brain Performance Institute, University of Texas at Dallas, JQ Engineering Dallas, Texas, Project Manager for QL-B and QL-A SUE Services associated with the design survey for the proposed expansion and improvements to the UT-D Brain Performance Institute. Provided subsurface utility investigation including identification and mapping of existing systems, water, sewer, power, gas, communications and stormwater.

Subsurface Utility Engineering, SH2, Commerce City, CO, CDOT, Project Manager for SUE QLB & QLA Services for 2-miles of State Highway 2, from 56th Ave to Parkway Blvd, through the interchange with I-270. Provided subsurface utility investigation including identification and mapping of existing systems and test holes.

Subsurface Utility Engineering, Wind Farm, Palo Duro Canyon, NextEra Energy, Perryton, TX, Project Manager for full SUE Services associated with the design and placement of 147 wind turbines, 180-miles of feeder/collector lines, 60-miles of access roads and three electrical substations. Provided subsurface utility investigation including identification and mapping of existing systems, hundreds of undocumented existing oil gathering pipelines located in the project window. Performed extensive EM & GPR clearing of turbine sites and collector corridors.

Subsurface Utility Engineering, Oil & Gas Terminals, New Tanks and 1-mile Pipeline, Magellan Midstream Partners Corpus Christi, Texas, Project Manager for QL-B and QL-A SUE Services associated with the design and placement of seven new 175' diameter petroleum storage tanks and one-mile methanol pipeline. Provided subsurface utility investigation including identification and mapping of existing systems, more than 22 existing petrochemical pipelines located in the design corridor

REPRESENTATIVE PROJECTS - 1998-2014

The White House, 1600 Pennsylvania Avenue Department of the Interior, NPS, Washington, D.C.

Project Manager for SUE locating and identification of top secret and confidential items and facilities North & South Lawns, Rose Garden and Ellipse. 3D Radar Tomography, standard GPR scanning, inductive EM scanning, electronic designating, record research and survey data collection for precision location and identification of all subsurface systems.

SUE Utility Investigation (3 projects), NASA Kennedy Space Center / JEA, Brevard County, Florida; Project Director for the construction of 28 miles of water and sewer system upgrades to the NASA KSC Launch Complex and related support areas within the base. Provided complete subsurface investigation, identification and modeling of existing systems, conflicts, and alternatives. Systems included water, sewer, natural gas, compressed nitrogen, steam and chilled water facilities, gaseous ammonia systems, liquid oxygen, liquid hydrogen, liquid rocket propellant, FireX systems, and reclaimed water facilities.

Project Director for the construction of 16 miles of sanitary sewer system upgrades to NASA Launch Complex and new support area for Space X Technologies. Provided complete subsurface investigation, identification and modeling of existing systems, conflicts, and alternatives. Systems included water, sewer, natural gas, compressed nitrogen, steam and chilled water facilities, gaseous ammonia systems, liquid oxygen, liquid hydrogen, liquid rocket propellant, FireX systems, and reclaimed water facilities

Project Director for the construction of 3.4 mile natural gas system upgrade to NASA Launch Complex and new support area for United Lift Alliance. Provided subsurface investigation, identification and modeling of existing systems, conflict analysis. Systems include water, sewer, natural gas, compressed nitrogen, steam/chilled water, gaseous ammonia systems, liquid oxygen, liquid hydrogen, liquid rocket propellant, FireX, and reclaimed water.

I-595 Expansion, US 441 to I-75 – Reversible Express Lanes, Fort Lauderdale, Broward County, FL Full SUE for \$2.62 billion, 13-mile Express Lanes. Provided project management and oversight, QA/QC of 3D SUE deliverables, conflict analysis and utility relocation assistance.

Subsurface Investigation, Geospatial Corp and University of Mississippi, Oxford, Mississippi, Project Manager for utilization of 3D Radar Tomography precision locating of existing subsurface systems as well. The project used standard GPR scanning, 3D radar tomography to map the entire investigation area as well as major facets of subsurface utility engineering including EM61 time domain Inductive electromagnetic scanning, vacuum excavation, electronic designating, record research, and complex survey data collection for precision location and identification of all subsurface systems.

Subsurface Investigation, Geospatial Corp and DoD/CIA/DIA/DARPA, Multiple Sites, Project Manager for utilization of 3D Radar Tomography precision locating of existing subsurface systems. The project used standard GPR scanning, 3D radar tomography to map the entire investigation area as well as major facets of subsurface utility engineering including EM61 time domain Inductive electromagnetic scanning, vacuum excavation, electronic designating, record research, and complex survey data collection for precision location and identification of all subsurface systems. Projects included "The Farm" Camp Peary, NC, Hurlburt Field, FL, Mayport NAS, FL, Pensacola NAS, FL, Kings Bay NSW, GA and Secret Sites.

Subsurface Investigation, Balfour Beatty, Multiple Sites, Project Manager for utilization of 3D Radar Tomography precision locating of existing subsurface systems. The project used standard GPR scanning, 3D radar tomography to map the entire investigation area as well as major facets of subsurface utility engineering including electromagnetic scanning, vacuum excavation, electronic designating, record research, and complex survey data collection for precision location and identification of all subsurface systems. Projects included **Fort Campbell, KY, Fort Benning, GA, Fort Bennet, GA & MacDill AFB, FL**

Subsurface Investigation, Balfour Beatty, Walt Disney World, Project Manager for utilization of 3D Radar Tomography precision locating of existing subsurface systems. The project used standard GPR scanning, 3D radar tomography to map the entire investigation area as well as subsurface utility engineering including electromagnetic scanning, vacuum excavation, electronic designating, record research, and complex survey data collection and identification of all subsurface systems. Projects included expansion of Polynesian Resort, Grand Floridian Resort and Two Parking Garages in Downtown Disney (Lake Buena Vista).

Utility Design & Engineering, Village of Bal Harbour, Florida, Project Director / Manager for engineering design, specification and construction of 5.4-mile sanitary forcemain connection BHV to City of Miami Beach. Project included design, specification and construction of a 20" HDPE FM along the center lane of SR A1A, connecting three (3) remote lift stations and one (1) master lift station to the City of Miami Beach 54" Regional forcemain and Virginia Key Treatment Facility.

Project Director / Manager for engineering design, specification and construction management of 2.1-mile water main extension along SR A1A, serving newly constructed hotels and condominiums. Project included a new 16" WM and dedicated 8" Fire Main along the right lane (Ocean Side) of SR A1A and connections to eight (8) existing high-rise properties and two new high-rise properties representing more than 3,400 residential units and 600 hotel rooms.

Utility Design & Engineering, City of Margate, Florida, Project Director / Manager for engineering design, specification and construction management of a 3.9-mile 20" HDPE sanitary forcemain along Margate Blvd and connecting the Margate and Western Broward Regional Treatment Plants. Project included jack & bore crossing of US 441 and subaqueous HDD crossing of L51 canal.

Utility Design & Engineering, City of Sweetwater, Florida, Project Director / Manager for engineering design, specification and construction management for a complex stormwater pumping system throughout the City of Sweetwater. Project included seven (7) stormwater pumping stations, stormwater pre-treatment systems (stormceptor) and 12-miles of HDPE and DIP stormwater forcemains ranging in size from 8" through 16". Project included more than 200 inlet structures and manholes and discharge connections to the L2 and C4 drainage district canals. Multi-year project funded by FEMA Hazard Mitigation Grants.

SUE and Utility Coordination, Light Rail Project, WAVE Modern Streetcar, South Florida Regional Transportation Authority/HDR Engineering, Fort Lauderdale, Florida, Project Director for the new design and construction of a 3.7-mile downtown circulator "streetcar" light rail system through heavily developed downtown Fort Lauderdale, Florida. Provided complete subsurface utility investigation and utility coordination including identification and modeling of existing systems, conflicts, and alternatives. Provided coordination with utility relocation issues and assistance with analysis of relocation alternatives for feasibility and potential conflicts with newly proposed and existing systems.

Rail Corridor Infrastructure Asset Inventory, Parallel Infrastructure Rail Corridor, Florida East Coast Railroad Palm Beach County, Florida, Project Director for ROW infrastructure asset inventory (location, identification and mapping) for parallel and intersecting facilities within FEC Rail corridor. Subsurface facility designation, 3D radar tomography, 3D CADD modeling of infrastructure, facility ownership identification. Pilot project for FEC Railroad in advance of future proposed passenger service conversions on existing freight corridor.

Subsurface Utility Investigation & Mapping, Amazon HQ, Seattle, WA, Project Director for the subsurface utility investigation for new Amazon HQ project covering 12 square blocks of downtown Seattle. Project included full 3D radar tomography subsurface investigation for utilities in advance of complete demolition and construction project for four 40-storey towers; 3D Modeling, system analysis, and utility coordination

Subsurface Utility Investigation & Mapping, LAX Runway, Los Angeles, CA, Project Director for the subsurface utility investigation for potential void analysis on runway and associated taxiway and aprons. Project included full 3D radar tomography subsurface investigation for voids to develop repair plan; 3D Modeling, GPR analysis

Subsurface Utility Investigation & Mapping, 6th St and Union Stations - OCTA, Anaheim, CA, Project Director for the subsurface utility investigation for proposed OCTA rail extensions and proposed union station. Project included full 3D radar tomography subsurface investigation for existing utilities; 3D Modeling, GPR analysis

Utility Location and Coordination, All Aboard Florida Commuter Rail System, Florida East Coast Railroad/AMEC Miami-Dade, Broward, and Palm Beach Counties, Florida, Project Manager/ Director for utility location and coordination at 166 grade crossings through Miami-Dade, Broward and Palm Beach Counties for new passenger/commuter rail services on existing freight service rail corridor. Provided Quality Level (QL) D, C and B SUE services, EM and Ground Penetrating Radar, and limited QL A services for location and exposure of potentially shallow facilities indicated to conflict with proposed double tracking/sidings

Subsurface Utility Investigation, Interstate 595, Broward County, Florida, Project Director for the subsurface utility investigation on the Interstate 595 project running 9.6 miles through Broward County, Florida. Project included full 3D radar tomography subsurface investigation for utilities in advance of complete reconstruction project for major east/west expressway system; 3D Modeling, system analysis, and utility coordination

Naval Air Station Key West, Naval Facilities Southeast, Key West, Florida, Project Manager for On-Call IDIQ Contract for SUE and Utility Locating. NASKW, Boca Chica Naval Air Station, Sigsbee Annex, Truman Annex, Trumbo Point, Fleming Key & Geiger Key Annex, locating of existing subsurface systems, permitting and excavation control.

MacDill AFB, CENTCOM, Tampa, Florida, Project Manager for On-Call IDIQ Contract for SUE and Utility Locating. MacDill AFB and all annexes, locating of existing subsurface systems, permitting and excavation control.

Naval Air Station Mayport / Mayport Naval Station, Naval Facilities Southeast, Jacksonville, Florida, Project Manager for On-Call IDIQ Contract for SUE and Utility Locating.

Naval Air Station Key West, Runway Rehabilitation & Artillery Area Reclamation, CH2M Hill & Naval Facilities Southeast, Key West, Florida, Project Manager for precision locating of existing subsurface systems as well as location and identification of Unexploded Ordinance (UXO). The project used major facets of subsurface utility engineering including standard GPR scanning, EM61 time domain Inductive electromagnetic scanning, vacuum excavation, electronic designating, record research and complex survey data collection.

Subsurface Investigation, Ft. Lauderdale-Hollywood International Airport, Central Florida Equipment – Odebrecht JV, Hollywood, Florida, Project Manager for precision locating of existing subsurface systems involved in new high-speed runway exits/taxiway aprons, FLL. This project utilized several facets of subsurface utility engineering including standard GPR scanning, electronic designating, record research and complex survey data collection.

Subsurface Investigation, Miami International Airport, Hypower Electric Inc., Miami, Florida, Project Manager for precision locating of existing subsurface systems involved in new Medium Approach Light System with Runway Alignment Indicator Lights (MALSR) and new Precision Approach Path Indicators (PAPI) for MIA. This project utilized several facets of subsurface utility engineering including standard GPR scanning, electronic designating, record research and complex survey data collection.

Subsurface Investigation, Palm Beach International Airport, Hypower Electric, West Palm Beach, FL, Project Manager for precision locating of existing subsurface systems involved in new Medium Approach Light System with Runway Alignment Indicator Lights (MALSR), new Precision Approach Path Indicators (PAPI) and new Taxiway Lighting for PBIA. This project utilized several facets of subsurface utility engineering including standard GPR scanning, electronic designating, record research and complex survey data collection.

Subsurface Investigation, Kennedy International Airport, ICF Kaiser – FAA Pilot Project, CAS/MPS3D/Witten Technologies JV, Jamaica, New York, Project Manager for 3D Radar Tomography precision locating of existing subsurface systems, concrete thickness, reinforcement spacing and utility presence. The project utilized 3D Radar Tomography to map a specified investigation area as well as major facets of subsurface utility engineering including standard GPR scanning, electromagnetic scanning, vacuum excavation, electronic designating, record research and complex survey data collection for precision location and identification of all subsurface systems.

Port of Miami Security Enhancements, Port of Miami, Miami, Florida, Project Manager for SUE. The project included the installation of more than 25,000 LF of conduit raceway and fiber optic cable for security camera and system enhancements. The project utilized horizontal directional drilling (HDD) to install 90% of the conduit installations. Utility location was critical to the success of the underground portion of the project. More than 1500 vacuum soft digs were performed as well as over 225 hours of ground penetrating radar studies to locate and map the existing subsurface systems.

SUE and **Utility Coordination, Port Everglades Security Enhancements, Port Everglades, Fort Lauderdale, Florida,** Project Manager for the subsurface utility engineering phase. The project included the installation of more than 85,000 LF of conduit raceway and fiber optic cable, camera pedestals, guard gates/houses and monitoring center for security camera and system enhancements. The project utilized horizontal directional drilling (HDD) to install 85% of the conduit installations. Utility location was critical to the success of the underground portion of the project... This project had critical features including significant underground fuel systems for the receipt and delivery of liquid fuel, crude oil, natural gas and bituminous products. More than 4,000 vacuum soft digs were performed as well as over 700 hours of ground penetrating radar studies to locate and map the existing subsurface systems.

Ulmerton Rd Widening, Wild Acres Road to Lake Seminole Bypass, Florida Department of Transportation (FDOT) Pinellas County, Florida, Project Manager for the FDOT's first major pilot study of 3D Radar Tomography. The project consisted of 1.4 miles of Ulmerton Road, a 160'Urban ROW corridor slated for major reconstruction as well as 1.1 miles of Starkey Road, a major north-south intersecting roadway consisting of 120' of urban ROW corridor. The total project area covered more than 1.8 million square feet and included 13 separate utility owners operating 18 different subsurface systems within the aforementioned ROW's. The project utilized 3D Radar Tomography to map the entire ROW corridors for precision location and identification of all subsurface systems. The project represents FDOT's first foray into complete 3D design including the utilization of Bentley's new MicroStation v8 3D CAD system

Orlando Magic Arena, 3D Radar Tomography Mapping, City of Orlando Public Works & Jacobs Engineering Orlando, Florida, Project Manager for the City's first major utilization of 3D Radar Tomography. The project consisted of 0.5 miles of Division Avenue, a 100'Urban ROW corridor slated for major reconstruction as well as South Street & Church Street, two major intersecting roadways consisting of 120' of urban ROW corridor. The total project area covered more than 220,000 square feet and included 9 separate utility owners operating 11 different subsurface systems within the aforementioned ROW's. The project utilized 3D Radar Tomography to map the entire ROW corridors for precision location and identification of all subsurface systems.

Marathon-Ashland Petroleum, Ohio Refinery Division, Canton and Louisville Refineries

Canton, Ohio and Louisville, Kentucky, Project Manager for precision locating of existing subsurface systems within complex refinery environments. These projects used all facets of subsurface utility engineering including standard GPR scanning, 3D radar tomography, EM61 Time Domain Inductive Electromagnetic Scanning, vacuum excavation, electronic designating, record research, and complex survey data collection.

Marathon-Ashland Petroleum, Ohio Refinery Division, Canton and Louisville Refineries, multiple states, Project Manager for locating & mapping of existing subsurface systems within complex terminal environments. These projects used all facets of subsurface utility engineering including standard GPR scanning, 3D radar Electromagnetic Scanning, vacuum excavation, electronic designating, record research, and complex survey data collection and terrestrial LiDAR. Projects in; Benton, SC, Raleigh, NC, Atlanta, GA, Roanoke, VA, Knoxville, TN, Nashville, TN, Louisville, KY, Cincinnati, OH, Columbus, OH, Birmingham, AL, Montgomery, AL, Garyville, LA, Mobile, AL, Indianapolis, IN, Chicago, IL, Bay City, MI

Motiva Enterprises (Shell Oil), Ethanol Conversion / Piping System Location & Evaluation, Port Everglades, Florida Project Manager for precision locating of existing subsurface systems slated for conversion to ethanol transport and delivery. The project utilized all facets of subsurface utility engineering including standard GPR scanning, 3D radar tomography, vacuum excavation, electronic designating, record research and complex survey data collection

Specialty Services

Long Island Electric – Pole Inventory & Assessment, Hauppauge, NY, Project Manager for comprehensive pole inventory and condition assessment. Manage crew of 20 performing inventory, inspection and cataloging of 18,000 power poles on Long Island, New York.

Verizon – Strike Coverage, Long Island & Upstate, NY, Project Manager for One Call and related services for coverage of striking Verizon Workers. Manage crew of 28 performing one call, ticket management and watch & protect services for six weeks of worker strikes Long Island, New York. Manage crew of 12 performing one call, ticket management and watch & protect services for six weeks of worker strikes for Albany and Rochester, NY

National Grid – Gas Valve Inventory & Recovery, Boston, MA, Project Manager for gas valve inventory and recovery. Manage crew of 16 performing inventory, locating, mapping and recovery of gas valves throughout Boston, MA. Work included locating and mapping valves that were paved over with asphalt or covered with concrete sidewalk.

SUBJECT MATTER EXPERT - SERVICES, CASES, TESTIMONY

Expert Witness Services / Testimony, Depositions 2015 - 2024;

- June 2024 City of Pompano Beach, Florida v. Florida Department of Transportation, and Anzac Contractors, Inc.
- March 2024 Marty Lira vs. Lone Star NGL Mont Belview LP, Et al
- February 2022 M's Pub, Mercer Management, United F&C, Columbia National, Farmers Mutual, Old Omaha Association V. Omaha Metropolitan Utilities
- October 2019 Old Market Fire, M's Pub, Mercer Management, Nouvelle Eve, Columbia National, Farmers, United F&C, State Farm, Nationwide, Travelers, USAA, Truck Ins., Shelter, Homesite, Phoenix Ins. V. North Central Services, Unite Private Networks, Cellco, Verizon Wireless, Omaha Metropolitan Utilities District
- July 2019 Aaron Callaway V. Enlink Midstream, LLC, MPS Enterprises, Inc. D/B/A Milford, and Solaris Water Midstream, LLC

Subject Matter Expert Services, Significant Cases - 2019 – 2024;

- February 2025 ATT v. Ask Sergio
- February 2025 Everstream v. Harvey Construction
- December 2024 Summit Utilities v. Gene Summers Const.
- November 2024 Crown Castle v. Indiana Underground
- August 2024 City of West Valley v. Lightwave Const.
- March 2024 Frontier Communications v. Parker Construction
- January 2024 DNT v. Contrerra Networks
- December 2023 Chesapeake, VA v. Utility Cable Inc
- December 2023 FCCI Parsons 348440
- June 2023 Patheon v. ATMOS Energy
- February 2022 Oncor v. Auger Drilling Corp.
- December 2021 Frontier v. Leak Eliminators
- December 2021 Frontier v. Avland Const
- December 2021 MCI v. All Terrain Tractor
- July 2021 Level 3 v. USA Construction
- April 2021 AT&T v. Watland Custom Underground
- April 2021 Global Optics v. Meza Construction
- May 2020 Century Link v.
- May 2020 FPL v. Lopez Utilities
- May 2020 FCCI Atmos Energy

- February 2020 FCCI- Center Point
- February 2020 FCCI--C00260591-Frontier
- February 2020 FCCI- Charter Communications
- July 2019 FCCI-- Leading Edge
- June 2019 Level3 / CenturyLink v. Texas Standard Construction FOC Damages
- June 2019 D&D Contractors v. Charter Communications FOC Damages
- January 2019 TxDOT v. John Wright Construction Failed Jack & Bore
- April 2019 Fiberlight v. John Wright Construction FOC Damages
- April 2019 Dallas Underground v. Frontier Communications, FOC Damages
- April 2019 Advanced Contracting v. AT&T FOC Damages
- March 2018 CenturyLink vs. Lakewood Villas HOA FOC & Copper Damages

Subject Matter Expert Services, Significant Cases - 2014 - 2019;

- June 2019 Level3 / CenturyLink v. Texas Standard Construction FOC Damages
- June 2019 D&D Contractors v. Charter Communications FOC Damages
- January 2019 TxDOT v. John Wright Construction Failed Jack & Bore
- April 2019 Fiberlight v. John Wright Construction FOC Damages
- April 2019 Dallas Underground v. Frontier Communications, FOC Damages
- April 2019 Advanced Contracting v. AT&T FOC Damages
- March 2018 CenturyLink vs. Lakewood Villas HOA FOC & Copper Damages
- November 2018 Alvand Construction Inc. v. Frontier Communications FOC Damages
- November 2017 Palm Bch Co. vs. Grid1 Elec. Sewer Main Damage HDD
- October 2017 Orlando/Orange Co. vs. Central Site Dev. Major HDD Damages
- September 2017 Spirit Communications vs. Airo, Inc. Dual FOC Damages
- July 2017 Comcast vs. Masci Const. CATV Damages
- November 2016 Town of Davie vs. Power Guardian Water & Storm Damages
- September 2016 Comcast vs. SW Disposal CATV Trunk Damage
- June 2016 Comcast vs. Haskins Const. FOC CATV Damages
- April 2016 Minto Communities vs. Spectrum Communications Sewer Damages HDD
- March 2016 CenturyLink vs. Sullivan Brothers, Inc. FOC Damages
- March 2016 Centurylink vs. ACCI Underground FOC Damage HDD
- February 2016 FPL FiberNet vs. SW Utilities FOC Trunk Damage
- November 2015 CenturyLink vs. Bermann Precision Underground FOC Damages
- November 2015 Level3 Communications vs. D Nelson Const. FOC Damage
- October 2015 Verizon vs. Tri-Sure Corp FOC Damages HDD
- April 2015 SeminoleStiles/Tribal Casino vs. Bateman Cont. Elec. Damage HDD
- December 2014 Verizon vs. Johnson Trust Copper Trunk Damage HDD
- August 2014 Florida Gas Trans. vs. Tropical Signs Gas Transmission Damage
- May 2014 City of Hialeah vs. Mesa Electric Water Main Damage HDD
- March 2014 Transcore/FDOT vs. Signal Group FOC VMS Damages
- January 2014 Transcore/FDOT vs. Boremasters, Inc. Major FOC Damages HDD

Testimony, Mediations & Administrative Hearings, 2003 -2013:

- November 2013, APEC vs. Molehead Construction/J.D. Weber Construction, et al
- June 2011, Chartis (AIG) / Craig A. Smith & Associates vs. JeffSabater
- July 2010, Craig A. Smith & Associates vs. City of Arcadia, FL
- September 2009, CNA Insurance / Craig A. Smith & Associates vs. Jeffrey Hoover

- March 2008, CNA Insurance / Craig A. Smith & Associates vs. Alexi Avilla
- November 2007, CNA Insurance / Craig A. Smith & Associates vs. Roger Travieso
- October 2007, Craig A. Smith & Associates vs. Broward County Purchasing
- August 2006, Giannetti Contracting Of Florida Inc. vs. Community Asphalt Corp
- July 2003, DeMoya Construction vs. Broward County & Craig A. Smith & Associates

PUBLICATIONS

- Navigating the Complexities of SUE Certification: A Closer Look at Professional Liability and Expertise
 - February 2024, BAMI-I Journal, Authors: Greg Jeffries, CUC, M.ASCE with contribution from Jim Anspach, PG, D.M.ASCE
- Utility Record Sources The need for comprehensive investigation: January 2024 LinkedIn Publishing
- Converting SUE CAD Files to GIS: A Perspective on Data Quality and Utility Records, December 2023, LinkedIn Publishing
- Effective Utility Records Research: The Roadmap to Precision and Accuracy, December 2023 LinkedIn Publishing
- Point of Beginning POB Magazine, Is SUE an Engineering or Survey Function, or Both?, Dec. 2017
- Vacuum Excavating Locating Utilities or Just Digging a Hole? October 2017, LinkedIn Publishing
- United Surveyors of Arizona Magazine / LinkedIn Publishing, Why Do Surveyors Undervalue and Undersell Their Services? Jan. 2017
- Almost SUE is not SUE, LinkedIn Publishing, March 2017
- Surveyor Magazine / LinkedIn Publishing, Surveyors The Latest Generation of Button Pushers, Jan. 2017
- Arizona State Surveyor Magazine / LinkedIn Publishing, UAV's Contributing to Unlicensed Surveying?, Dec. 2016
- Damage Prevention Professional Magazine, "Utility Graffiti", Need for Marking Standards, Summer 2014
- Damage Prevention Professional Magazine, Low Impact Marking Issues, Practices, Education & Enforcement, Spring 2013
- Damage Prevention Professional Magazine, NULCA's Commitment to Training, Summer 2012
- Florida Department of Transportation News, Radar Tomography A "Tool in the Toolbox", April 2010
- Florida Department of Transportation Central Office Utilities, *Radar Tomography Study Project, Ulmerton Road District 7 Lessons Learned,* Oct. 2006

BOARDS & COMMITTEES

- Foundation Board Member Subsurface Utility Engineering Association
- ASCE-UESI Subsurface Utility Engineering & Investigation Committee Chair
- ASCE-UESI Utility Risk Management Division, Core Member/ ExCom Committee Vice-Chair
- Buried Asset Management Institute International, Board of Directors, Executive Group Secretary
- BAMI-I, Chapter Founder Saudi Arabia
- BAMI-I, Chapter Founder Dubai, UAE
- Past=President NULCA, February 2017 through February 2019
- President NULCA, February 2015 2017
- Co-Primary Common Ground Alliance Stakeholder Advocacy Group
- Member Common Ground Alliance Best Practices Utility Markings Task Team
- Group Nominee Industry Board Seat, Sunshine One Call of Florida for 2013 2015 Sessions
- Editorial Board Member Damage Prevention Professional Magazine
- Vice-Chair Damage Prevention Committee, Sunshine 811 2013 / 2014
- Vice President National Utility Locating Contractors Association, February 2013 through 2015
- Secretary National Utility Locating Contractors Association, March 2011 February 2013
- Board Member National Utility Locating Contractors Association, 2007 2011
- Legislative Committee Primary NULCA, August 2007 February 2011
- Chair Florida Utilities Coordinating Committee Underground Interest Group, 2008/09

- Vice Chair Florida Utilities Coordinating Committee Underground Interest Group, 2007/08
- Member Low Impact Marking Committee, Sunshine One Call of Florida, 2007/08
- Member Legislative Committee, Sunshine One Call of Florida, 2006/07 & 2013/14
- Member Rules & Compliance Committee, Underground Contractors Association 2006/07

SPEAKING ENGAGEMENTS / CONFERENCES & SEMINARS

- Invited Speaker, GCINFRA2024 Conference Dubai, UAE, October 2024
- Invited Speaker, Saudi Infrastructure Expo 2024, Riyadh, KSA, September 2024
- Scheduled Speaker, Oklahoma Society of Professional Engineers (OSPE) Conference June 2024
- Scheduled Speaker, Global GPR Congress, May 2024
- Instructor 2022, 2023, 2024, BAMI-I / Purdue University Utility Investigation School
- Speaker ASCE-UESI 2018 Surveying Geomatics Conference, CalPoly
 - "SUE, Is It Surveying, Engineering or Both?"
- Speaker United Surveyors of Arizona 2018 Geomatics Retreat
 - "Why Do Surveyors Undervalue & Undersell Their Services?"
- Speaker CGA Conference 2018 Educational Objectives for UESI
 - CGA/ASCE-UESI Educational Conference Track
- Invited Speaker Utility Investigations Summit / NULCA Australia Conference 2017
 - "Surfer's Paradise, Gold Coast, Brisbane, Australia"
- Speaker Mid West Damage Prevention & Training Conference 2015
 - "Effective Use of GIS Data in SUE Applications"
- Speaker CGA Conference 2015 Changes Needed in Utility Marking Standards
 - CGA/NULCA Best Practices Task Group Conference Track
- Speaker Oklahoma Society of Professional Engineers (OSPE) Conference 2015
 - "Subsurface Utility Engineering Benefit Cost Analysis"
- Speaker CGA Conference 2014 Utility Marking Standards
 - CGA/NULCA Conference Track Speaker
- Sunshine 811 Marking Standards Presentations 2013
 - Locating Industry Expert, Sunshine 811 Invitation
- Panelist Sunshine 811 Locator Round Tables / Safe Excavation Forums 2013
 - Locating Industry Expert, Sunshine 811 Invitation
- Panelist PHMSA State One-Call Exemption Forum, CGA Conference 2013
 - Locating Industry Expert, NULCA Appointment
- Lecturer Florida Atlantic University College of Geomatics 2009
 - 3D Radar Tomography for Survey Accurate Depiction of Subsurface Features
- Speaker Geospatial Information Technology Association, 2007 Conference
 - · Remote Sensing 3D Technologies for Underground Utility Detection
- Speaker Trenchless Technology Forum, Louisiana Tech University 2006
 - "Innovations in Utility Detection and Depiction using Radar Tomography"
- Conference Session Leader Damage Prevention Conference, Minneapolis 2004
 - "Vacuum Excavation Water vs. Air, Safety and Risk Factors"
- Conference Session Leader Damage Prevention Conference, Tampa 2003
 - "Vacuum Excavation Water vs. Air, Safety and Risk Factors"
- Presenter South Florida Ecosystem Restoration Task Force, Miami 2002
 - "Alarming Disease Potentials in Retained Stormwater Flooding"

AWARDS

Excellence in Project Management – Florida Department of Transportation, I-595/I-95/SR84 Project with Post, Buckley, Schuh & Jernigan

Project Bragging Rights Award – Florida Department of Transportation, I-75/I-595/SR869 Interchange, Excellence in Project Administration